

Amendments to the Specification

Please add the following new paragraphs prior to the paragraph beginning at page 2, line 10 of the specification:

The invention is a mixing system for mixing a plurality of constituents that includes a collar configured for coupling to at least two containers, and a head, including a cartridge, coupled to the collar. The collar can include openings sized to hold the containers. The cartridge has a plenum, a mixing canal, and an outlet that are connected to pass and mix the constituents within the containers when the constituents are released from the containers. The mixing canal can include a plurality of columns for facilitating the mixing. The cartridge can include a plurality of input ports preceding the plenum, where each input port is for passing one of the constituents. The head can have a lever to activate the release of the constituents into the plenum. The constituents are mixed in the cartridge to provide a thoroughly mixed product made up of the constituents. The columns are disposed within the mixing canal to promote turbulent flow within the mixing canal to mix the constituents before they are passed through the outlet. The columns can be, for example cylindrical, fin-shaped or oval. The columns can number about 10 to about 50. The system can further include a base configured for receiving and securing the containers.

In another aspect, the invention is a method of producing a mixing device for a plurality of constituents. The method includes the steps of molding a head piece, a cartridge piece and a cover piece. The cartridge piece includes a mixing chamber with a plurality of columns integrally formed thereon. The method further includes fitting the cover piece onto the cartridge piece and the cartridge piece into the head piece. Molding can include integrally molding input ports onto the cartridge piece configured for each receiving a constituent, a plenum coupled to the input ports at one end and to the mixing chamber at another end, and an outlet coupled to the mixing chamber. A lever can be integrally molded with the cartridge piece.

The system provides a method of mixing a plurality of chemicals from pressurized containers by actuating a plurality of actuators to release a plurality of constituents, separately passing each of the plurality of constituents into a cartridge,

passing the plurality of constituents around a plurality of columns to thoroughly mix the constituents, and ejecting the thoroughly mixed constituents. The cartridge can be configured as described herein.

The mixing system thus includes a means for activating a plurality of actuators to release a plurality of constituents, a means for separately passing each of the plurality of constituents into a mixing means; a means comprising a plurality of columns for mixing the plurality of constituents; and a means for ejecting the thoroughly mixed constituents.

In another aspect, the mixing system includes two containers of constituents, a cartridge having a mixing canal for mixing the constituents in the containers, a head for holding the cartridge, and a collar connecting the head and the cartridge to the containers. The system includes an outlet port through which mixed constituents are dispensed. The head can hold the cartridge internally. The collar, head and cartridge can be coupled by a snap-to-fit or friction-fit method. The mixing canal can be a hollow through which the constituents are passed and mixed. The constituents within the containers can be released by pressing on the top of the head. The head can include a lever to activate release of the constituents into the cartridge.

There is thus provided a method of mixing a plurality of constituents from pressurized containers by providing two containers that contain the constituents to be mixed and a mixing system that includes a cartridge with a mixing canal for mixing constituents contained in the containers, a head for holding the cartridge, and a collar. The containers are connected to the head and the cartridge with the collar. A valve on each of the containers is actuated to release the constituents by pressing on the top of the head. Each of the constituents is separately passed into the cartridge and the mixed constituents ejected. The mixing system thus includes a means for activating a plurality of actuators to release constituents from each of a plurality of containers, a separate means for thoroughly mixing the plurality of constituents, and a separate means for attaching the activating means and the mixing means to the containers. The means for thoroughly mixing the plurality of constituents can include a means for passing each of the plurality of constituents into the mixing means and means for ejecting the thoroughly mixed constituents.